

## The Driverless Car Revolution

- A)** Some of the world's cleverest scientists and engineers are pioneering a new generation of driverless cars that will change our lives as much as the internet has already done.
- B)** The idea of self-driving vehicles will sound like science-fiction to many, but the prototypes already work, using 360-degree sensors, lasers, learning algorithms and GPS to navigate streets in an astonishingly precise fashion. They are likely to go mainstream in 15 to 20 years' time and are a genuinely exciting, game-changing breakthrough that refute the myth that our economy has ceased to spawn major technological innovations. Google's vehicles have already driven more than 400,000 miles without an accident and are beginning to be legalised in US states.
- C)** The technology could trigger a burst of economic growth, transform transport around the world, free vast amounts of time, increase productivity, make us a lot wealthier and unleash drastic, unpredictable economic and cultural changes. By allowing people to relax or work as they commute, they will deal a devastating blow to public transport in all but the densest, most congested areas.
- D)** The biggest US think-tanks, universities, forecasters and corporations are busily trying to work out how, not if, the world will change as a result of driverless cars, and who the winners and losers will be.
- E)** Driverless cars will have huge advantages. Commuting will become useful, productive time, saving many people two or more hours a day that are currently wasted. The number of accidents will fall by at least 90pc, scientists believe, preventing thousands of deaths, by controlling distances between vehicles, braking automatically and eliminating human errors and reckless driving. The superior safety of driverless cars means that it ought to be possible to reduce their weight, cutting back on fuel consumption, and to redesign car shapes, making them more like living rooms. Even car sickness could be reduced, with smoother driving.
- F)** The dynamics of commuting will change as it will no longer be necessary to find a parking space on arrival: the driverless car could either park itself at some distance from the workplace or even return home, before picking up the passenger in the evening. Fewer people may want to own cars, with rental becoming more attractive. This could allow residential parking areas to be put to other uses.
- G)** The look and feel of roads and towns will drastically change. It will be possible to cram in far more cars into existing roads, driving at much faster speeds. Simulations of intelligently controlled intersections from the University of Texas suggest that they perform 200 to 300 times better than current traffic signals. Self-driving vehicles will have the ability to "platoon", acting almost like train carriages on motorways, increasing lane capacity by up to 500pc, according to research from the US Institute of Electrical and Electronics Engineers.
- H)** Far more people will travel at night, sleeping at the same time, especially for longer trips such as holidays, reducing the demand for train and short-haul plane journeys. Driverless cars will once again boost the value of suburbs and country living, and their house prices: far more people will be willing to commute much longer distances to work or school. This will encourage cities to become even more sprawling, putting massive

pressure on existing planning rules. The premium on living centrally will be reduced, albeit not eliminated because of congestion, which means there will still be a need for some urban rail services.

**I)** The transition process will inevitably be painful. Like all technological shifts, self-driving vehicles will threaten some existing jobs, including that of many professional drivers, though consumers will have more money to spend on other things, creating employment in those areas.

***Which paragraphs contain the following information?***

1. It is predicted that many lives will be saved.
2. Prototypes have already been tested successfully.
3. Motorways will be used more efficiently.
4. The impact on transport by rail and plane.
5. Drawbacks for certain professions.